

We claim:

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5 1. (Amended) A method for automatically controlling the gain in a radio frequency signal reception device, said device comprising at least one first low-noise amplification stage placed following a reception antenna, and at least one variable-gain device placed in the reception facility, the method comprising the steps of:

neutralization of the signal received by the antenna; and
adjustment of the gain during the neutralization of the signal received
10 until a predetermined noise level is obtained at the end of the reception facility.

15 2. (Amended) The method according to Claim 1, wherein the neutralization of the signal received is carried out by cutting off the supply to the first low-noise amplification stage.

20 3. (Amended) The method according to Claim 1, wherein during signal reception, the following steps are performed:

extraction of the noise power at the end of the reception facility; and
adjustment of the gain until a predetermined noise level is obtained.

25 4. (Amended) The method according to Claim 3, wherein the extraction of the noise power at the end of the facility is carried out by performing the following steps:

sampling and digitization of the signal at the end of the reception facility;
digital demodulation of the digitized signal;
modulation of the demodulated signal; and
calculation of the noise power from the modulated signal and the digitized
30 signal.

35 5. (Amended) A radio frequency signal reception device, said device comprising:

at least one first low-noise amplification stage placed following a reception antenna;

at least one variable-gain device placed in the reception facility;
means for neutralizing the signal received by the antenna; and
means for adjusting the variable-gain device as a function of the noise level at the end of the reception facility.

6. (Amended) The device according to Claim 5, wherein the means for neutralizing the signal received are switching means which switch the supply of the first amplification stage.

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7. (Amended) The device, according to Claim 5, further comprising:
means for extracting the noise power during the reception of the signal; and
means for adjusting the variable-gain device as a function of the noise level extracted.

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8. (Amended) The device according to Claim 7, wherein the means for extracting the noise power during reception includes:

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means of sampling and means of converting the signal at the end of the facility into a digitized signal;
means for performing the digital demodulation of the signal and for obtaining a demodulated signal;
digital modulation means for modulating the demodulated signal and obtaining a modulated signal; and
means for calculating the noise power from the modulated signal and the digitized signal.

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9. (Amended) A device for transmitting/receiving radio frequency signal transmitted by a satellite, comprising:

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at least one first low-noise amplification stage placed following a reception antenna; and
at least one variable-gain device placed in the reception facility.

10. (Newly added) The device according to Claim 9, wherein the means for neutralizing the signal received are switching means which switch the supply of the first amplification stage.

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11. (Newly added) The device, according to Claim 9, further comprising:
means for extracting the noise power during the reception of the signal; and
means for adjusting the variable-gain device as a function of the noise level extracted.

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